



## NASHVILLE JOURNAL

OF

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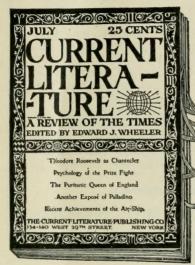
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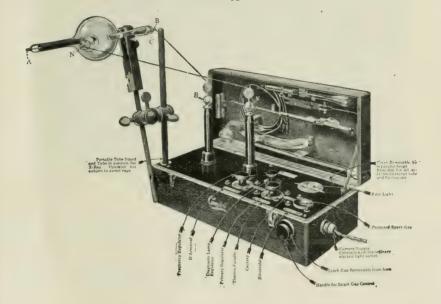
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CHARLES S. BRIGGS, A. M., M. D., Editor

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#### **Original** Communications

DEFECTIVE VISION FROM ALCOHOL — AN ACTIVE CAUSE OF ACCIDENTS.

BY T. D. CROTHERS, M.D., Superintendent Walnut Lodge Hospital, Hartford, Conn.

It has been known for a long time that a certain percentage of accidents are due directly to the mental condition of the person responsible, and when this condition is due to alcohol the causation is very clear.

An analysis of the causes of accidents on railroads and with motor cars brings out the startling fact that in over 50 per cent of these cases, alcohol is the responsible cause. One authority traced 200 accidents, occurring with motor cars, a large part of which attended with fatality, to the use of alcohol just before the accident. In most of these cases the drivers were not intoxicated, or supposed to be under the influence of spirits.

Many of these cases are illustrated in the following: The driver supposed to be a temperate man, after two glasses of spirits, failed to see the red lights of danger on the bridge, and plunged down into the stream below. Another driver, after taking a single glass of brandy, tried to cross the track before an approaching train and was killed. In another accident, a man supposed to be temperate, complained of cold and took some whiskey to relieve him, and a half hour later he went around a curve at high speed and down an embankment. These are very

common incidents and can be duplicated in almost every section of the country.

Railroad accidents where the engineer fails to recognize the danger signals or forgets to obey orders, and permits the train to run at high speed over dangerous parts of the road, and in many other ways, fails to observe the exact requirements and the ordinary cautions called for, in the last analysis, is referred to the use of alcohol and the supposed bewildered condition preceding the disaster.

Recently the fact has come to notice that defective vision, due specifically to alcohol, is a far more frequent cause of carelessness and disaster than any other condition.

This is seen in persons who are supposed to be temperate and who are not recognized as drinking men, or are even known to take spirits, except at long intervals. Men, whose eyesight is supposed to be normal, suddenly develop temporary defects from the use of spirits, and later these functional disturbances pass away.

A railroad engineer who had been repeatedly examined and was found to have good sight, showed a surprising defect in not seeing the red lights of warning, and not heeding the danger signal that was against him. This occurred on several occasions in the course of a year. At other times he seemed normal and recognized the signals naturally. Inquiry was made and it was found that on the return trip of a long journey he had taken spirits for weariness and fatigue, and for the next two hours his eye-sight was seriously affected. His color sense was destroyed or so dimmed as to be unrecognized. He stopped the train on several occasions, thinking an obstruction was before him. The inference was clear that alcohol had disturbed the sight and that he was unable to recognize the signals for some little time and until the effects of the spirits wore off.

In another case a tower man showed very startling confusion in the removement of the switches and the display of signals. Several slight accidents happened. It was finally determined that he had taken a glass of spirits, although he was not a drinking man. Not infrequently gate men and persons operating

switches make mistakes which are traceable to some unknown conditions of mind and eyesight. Later it is found that they had been drinking.

Recently a gateman who had spent a half an hour in a nearby saloon permitted a funeral procession to cross the track at the time for a fast express. One carriage load of people were destroyed and a most serious accident followed. The gateman disappeared, but the causes were evidently an alcoholized brain which failed to remember or reason of the danger.

The foreman of a bridge construction company, after a dinner at which spirits was taken, neglected to use the ordinary precautions of fastening the rails to permit the safe crossing of a train. As a result a very serious accident followed in which several cars were wrecked and one or two persons killed.

The railroad companies have a great variety of facts pointing to alcohol as an active cause, which are not made public, and in fact are concealed to a large extent. From the train dispatcher down to the gateman, the entire transportation service of the great trunk lines, the number of accidents due to spirits alone, far exceeds that of any other one cause.

Defects of vision, defects of memory, failures to reason promptly and wisely, bad judgment and so on—all pronounced injuries and departures from the normal that are due to alcohol—are the direct causes of the terrible fatalities and accidents so common.

In a study of the history of a vast number of these accidents, it is found that in the course of events a certain number of accidents will occur. There are due to unforseen conditions, of surroundings and of mental and physical health and efforts to adjust oneself to these conditions. In the course of years this percentage remains about the same; that is, a certain number of farmers, mechanics, railroad men and men in all vocations of life, will be injured and die from unforeseen causes and accidents. The effort of preventive medicine is to eliminate and diminish this casualty rate to the lowest ebb.

In a study of these conditions, alcohol comes in as a most prominent factor. Formally, when alcohol was only recognized as a stimulant and tonic, it was not considered as influencing casualties of human life. Now with a larger view of the anæsthetic quality of alcohol, it is found to be the most prominent factor in precipitating disease and death.

In a more accurate study of the casualties, the failures of responsible persons are not traceable to excessive use of spirits, only in rare instances. The gatetender, the switchman or the towerman may be apparently bewildered by spirits, but he is not permitted to continue his work in this condition.

The peril from his mental condition is recognized. It is the man who is not intoxicated, who may not have drank one or two glasses and apparently seems in no way worse or different from his use of spirits. His sudden disabilities entirely unforeseen are the direct cause of the casualty which follows. The spirits even in small quantities have covered up his real condition and given him a false estimate of his ability and a certain recklessness of conduct that he was not aware of.

Everything seems to be exact, correct and of the highest efficiency to him. Only later, when this delusion passes away, does he recognize his real condition. The man in the motor car has lost his caution and good judgment. All his senses are lowered, some of them very sharply dimmed. Thus his sight and hearing are defective. Other senses suffer in the same way, and what seems to him exact and real is the very opposite. The narrow place in the road seems wide, with abundant room. The steep precipice on the side of the road has no peril to him. The speed of the machine is under his perfect control and his appreciation of danger is diminished to a minimum. What would seem to be a risk and danger to others is insignificant to him. This may all come from a very small amount of spirits, and may not be apparent to the observer.

These are distinct evidences of favoring conditions for accidents which are sure to follow.

The engineer suffering from a sense of fatigue and weariness reasons that the disappearance of these symptoms from a glass of spirits is evidence of his former alertness of mind and senses, and when the effects wear off and more spirits are taken, the delusion of strength becomes more and more fixed in his mind.

The towerman has no doubts or hesitancy about the signals and his duty. The telegraph operator is equally certain that he is using all the capacity he possesses. In reality he is diminishing and disturbing the very power he depends upon.

If the exact physiological effects of alcohol on the brain were recognized and known, there would be no spirits taken and the accidents which follow would be diminished and referred to other causes. The delusion that alcohol is a stimulant and tonic explains its frequent use by men in responsible positions who, with a larger knowledge, would not dare to use it.

The anæsthesia of alcohol is a very uncertain quality and may concentrate on any one of the senses or in some part of the brain, producing effects that are not understood by the person.

The flushed face after a glass of spirits is vasomotor paralysis of the capillaries, and this extends to the brain. The prolonged stare of the man who has drank a glass of spirits is traceable to congestion of the retina and inability to focus the light. The convulsive and impulsive movement of the muscles following the use of spirits, show that the control center is deranged, and so on.

Musicians who depend on a trained sense of hearing realize at once the faults that follow a single glass of beer or wine, and while playing, abstain. Good musicians detect at once the faults of band music where the players use beer—faults in time, faults of rhythm and lack of steadiness in rendering the notes. The great bands of the country demand that each player should be a total abstainer at all times to do the best work. This is a recognition of the depressing effects of spirit on the sense of hearing.

In vocations requiring rapid and accurate thought, repeated experience shows the incapacity of the drinker, no matter how small the quantity may be. The proportion of mistakes and errors are far beyond what they would be otherwise.

This is not noted so sharply among trained men whose business is automatic and from day to day about the same. While their judgment and senses may be less acute as moderate or occasional drinkers, they apparently seem to do the ordinary work

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without much variation, but give them new work, something to which they are unaccustomed, and the mental failure is very evident.

There is a great wealth of illustration along these lines which enter into the experience of almost any close observer. The conclusion is sustained by an ever increasing mass of evidence, that the anæsthesia from alcohol constitutes one of the most active causes of accidents and failures known.

A second conclusion is that the sight and hearing are often the most seriously affected, although this may be temporary and pass off in a short time. The impairment of vision, whether temporary or permanent, is to be recognized in all persons who use spirits, and in case of accident to be the subject of inquiry.

### Proceedings of Societies

CINCINNATI ACADEMY OF MEDICINE.

The motion of Dr. J. C. Oliver, put two weeks ago, was acted on and carried, viz.: That the annual dues of the Academy of Medicine be \$5. This increase takes effect in 1914.

Dr. Walter R. Griess presented a specimen of gall-bladder removed with stones in situ. It was a case of ruptured gall-bladder, and the diagnosis was made before operation on general symptoms, bile in urine and no jaundice. Dr. E. M. Baehr asked how the bile became excreted by the kidneys. Dr. Griess replied through absorption from general peritoneal cavity.

Dr. J. E. Pirrung presented a specimen of colon removed (colectomy) for intestinal stasis, which persisted even after a short circuiting operation had been done a year ago. There was a narrow point in the colon below the anastomosis.

Dr. Wm. C. Herman presented color photograph of diabetic gangrene of the foot, which showed no line of demarcation. Case was fatal and was not operated on. Dr. Griess said that while he did not urge operation in these cases, "Cellasin" had been very beneficial in a number of cases in his experience.

Dr. D. DeNeen reported an intramural cyst of the abdominal parietes, with pus tubes and ovaries from the same case. Dr. Ransohoff asked as to the pathology of the cyst. Dr. DeNeen said it was possibly cyst of the urachus.

Dr. M. A. Tate reported a Cæsarean section for complicating carcinoma of the rectum high up. This case had a large mass in sacral portion of pelvis obstructing normal delivery, and it was necessary to do a Cæsarean section to effect delivery. Mother and child lived.

Dr. John Hadley Caldwell reported in detail, with X-ray plates before and after operation, the following two cases successfully operated; both recovered: (1) Posterior gastro-enterostomy for cancer obstruction of the pylorus; (2) posterior gastro-enterostomy for ulcer cicatrix causing obstruction.

Dr. Walter Griess reported a gunshot wound of the abdomen with fourteen perforations of the hollow viscera. Patient made good recovery for fourteen days and then developed septicemia due to a septic thrombosis of the femoral vein. This thrombus with inguinal gland was removed at a second operation, and patient recovered. Dr. J. C. Oliver asked if the abdomen was flushed at time of first operation. Dr. Griess said he had not been guilty of flushing the abdomen since he left the City Hospital. Dr. Haines, in discussion, said the interesting part was the complication. He held thrombosis would at times occur in apparently clean cases. He has cases occur in his practice, some in clean cases, but he thought thrombi were all infectious in character.

Dr. W. D. Haines reported a case of perforating appendicitis and rupture. Operated ninety-six hours after onset. History—No temperature until after eighty hours from onset, and no vomiting from eighty to ninety-six hours when temperature was present. Perforation found in head of cecum and in appendix at operation. Recovery.

Dr. Charles E. Caldwell presented a case of intestinal obstruction with operation and fatal outcome. Acute obstruction for four days treated with heavy purgation; brought into hospital in bad condition. Intestines a tangled mass of adhesions; gut emptied in two places. Colon contained tumor mass of feces. Dr. Griess, in discussing, said in this type of case it was often best to do a simple enterostomy and get out and take a chance.

Dr. Sidney Lange presented X-ray plate of cervical rib. It was a very clear and beautiful demonstration. Patient of Dr. Percy Shields, who had made the diagnosis before the plate was made.

Dr. Charles T. Souther reported the case of a patient on whom he had done a fibroid hysterectomy two years before. She became constipated, was treated by her physician for two days, and vomited profusely as a result of cathartic. On examination abdomen was found flat, and mechanical obstruction ruled out. Expectant treatment for thirty days, after which bowel was thought

able to stand a physic. Two drops of ol. tiglii produced a stool. Case recovered.

Dr. Rufus B. Hall said, in reference to cases reported by Dr. Caldwell and Dr. Souther, that a great deal of judgment was necessary to handle these cases, and we should do what was best for the patient. They would frequently be tided over by enterostomy. Physics did a great deal of harm, and the complete operation could only be done on the early cases. Many late cases will die for all of us. Do a brief operation to tide over, and many cases will not need a second operation. Dr. J. C. Oliver said drainage or enterostomy will aid late cases. Complete operation should be done on early cases.

Dr. Joseph Ransohoff made a motion that all case reports presented on case report night, be made through the Program Committee, and take precedence over those not on the program. Seconded and carried.

Suggestions from the Chair—In view of the fact that representations have been made to me as president that case reports on the evening set aside for them are not sufficiently diversified to appeal to the interest of the entire membership, I have requested the Committee on Programme to arrange for the proper representation of the three sections of the Academy, namely, medicine, surgery, and the specialties, on case report night. Members desiring to present case reports on that night will, therefore, communicate with their respective representatives on the Program Committee. Announcements of case reports sent to the secretary will be forwarded by him to the Program Committee. No case report will be announced in The Bulletin until reported for that purpose by the Program Committee. Volunteer case reports can not be entertained until after those regularly announced have been presented.

Dr. August Ravogli presented a patient with mycosis.

Dr. Samuel Iglauer then read the paper of the evening—"Suspension Laryngoscopy, with Demonstration on a Patient and Report of Cases." Dr. Iglauer's paper took up some of the history of the development of this work, presenting several instruments and much of the detail of their use, followed by an excellent

demonstration on a patient, using only cocaine as an anesthetic. Scopolamine, morphine and general anesthetic are necessary in some young subjects. Local anesthetics will answer where the patient can be educated to the procedure. The cases reported included surgical procedures (intralaryngeal), such as removal of papilloma, treatment with cauterization of ulcerated areas, etc., by the direct method. Full report will appear later in *The Lancet-Clinic*.

Dr. J. W. Murphy, in discussing, complimented the essayist on the excellent presentation of a very modern method, and spoke of the many advantages it possesses, giving the caution that all intralaryngeal surgery was major work, and should be done in the hospital in order to be able to combat any development of edema of the larynx.

Dr. Walter R. Griess presented a very complete specimen of carcinoma of the breast removed entire from above down, including all the axillary glands, pectoral muscles and lymphatics.

Dr. B. M. Ricketts presented specimens of goitre removed from four patients—two males and two females—with a brief history of the cases, and said that all the cases were large and of exophthalmic type. All male cases coming under his observation had had some impairment of mental function. He prefers Japanese silk (fine) for ligation of vessels in these cases. The upper pole of the remaining half of the thyroid was ligated in two of the cases. Cases all convalescent.

Dr. M. A. Tate then read the first regular paper of the evening on "Splenectomy." This was a very complete paper, covering in a concise manner the early surgery and the gradual evolution of the operation up to the present time. A gradual decline in mortality to nearly 10 per cent was noted in cases that were operated before the extreme stages of the disease were reached. He spoke of how little was definitely known concerning the function of the spleen. He quoted largely from the literature to arrive at a reasonable expectancy as to mortality, indications for operation and relative frequency of the different pathological lesions affecting the organ. One personal case was cited which, while it was an extreme case and had a stormy convalescence, recovered.

Dr. Ricketts, in discussion, said that man could exist minus the spleen, that the function was not known. He held it would be interesting to know the evolutionary result of experimental removal of the spleen in successive generations of animals to see if the spleen would remain constant. The spleen is rarely absent congenitally. He congratulated Dr. Tate on an excellent paper.

Dr. W. E. Schenck said that experimental removal of the spleen in a dog produced an enormous appetite and loss of ability to choose or select food. The dog would eat its own excrement.

Dr. Chas. E. Caldwell then read the second regular paper, entitled "Operative Treatment of Ankylosis." Dr. Caldwell gave a very excellent résume of the work of Payr, Lexer, Murphy and others. The paper was illustrated by a number of personal sketches to illustrate the technique of the different operations. Lexer transplanted the entire knee joint in 1907, but there is some question as to the permanent function of the bone transplanted. A very great amount of absorption of bone follows work on the knees, elbow, shoulder and hip. The indications and contra-indications were very fully given. Some personal work and cases were added to the literature, and considerable detail as to the long careful after-treatment was given.

Dr. A. H. Freiberg, in discussion, drew special attention to the fact that the knee joint was not favorable for the interposition of a fascia flap. Any operation that destroys the articulating surfaces and ligaments would rarely be followed by anything but a weak joint with too much lateral motion to be of service as a weight-bearing joint. The shoulder and elbow are more favorable, because muscle forms part of the joint support. The knee joint has no muscular support, and when the ligaments are destroyed the weight-bearing function of the joint is permanently impaired. Primary results are better than late results.

Dr. Moses Scholtz presented a patient with therapeutic or drug dermatitis.

Dr. G. W. McCaskey, of Fort Wayne, Ind., was then introduced and read a paper on "Functional Diagnosis of Kidney Lesions." The doctor presented a paper of unusual excellence, covering an exhaustive résumé of the best of the literature on this

subject, backed up by extensive personal investigation and experiment. The paper was a comparison of the relative merits of the value of chemical agents and drugs, such as phenosulphotalene vs. chlorides, urea and water as physiological tests of the functional secretory powers of the kidneys. This paper should form the basis for a monograph, as its practical importance would certainly seem to justify such measures. Dr. McCaskey was very moderate in drawing any conclusions of a definite character other than the weight carried by the report of his carefully controlled scientific experiments. Importance and emphasis was laid on carefully preparing a case before the tests were made, and that he frequently gave the patients as much as five days' preparation. Phenosulphotalene shows a wide variation at short intervals in the same patient, and depends on the sub- or hyper-saturation of the system with water for its rapid or slow excretion to a very considerable degree. Urea given in ten to thirty-grain doses has as definite a value as do the non-physiological drugs, and is modified by the same influences. Sodium chloride acts much the same way, and water bears a definite relation to its sub- or hyper-saturation proportion in the tissues. That the element of exercise and percentage of loss of kidney tissue are all to be reckoned with in the estimation of the several tests.

Dr. John E. Greiwe read the second paper of the evening: "Nephritis: Its Frequency and Prophylaxis." Dr. Greiwe presented a tabulation of postmortems made at the Cincinnati Hospital for four years, and in 667 cases only one case with a perfectly normal kidney was found. It showed that the diagnosis was frequently overlooked. Special emphasis was laid on the influence of acute infections of all kinds on the kidney. A plea was made for a routine examination of urine in all acute infections, not only one test but many on successive days. The great value of sudden increase in food, as a test for the functional power of the kidney was emphasized. Exercise was also spoken of as a very excellent and sure test for the functional power of the kidneys. Importance of going back in the history of adult cases to get the possible beginning of the nephritis was urged.

It was suggested that the word nephritis be used less frequently, and that nephropathy be substituted.

Dr. Paul G. Woolley, in discussion, said the term nephritis implies a kidney damage of either a permanent or a transitory type; that we may have albumin and casts, and yet have no definite nephritis. The statistics from the hospital were largely of what is known as the terminal type of nephritis, many of which may occur just previous to death. Nephritis is largely a vascular disease.

Dr. Martin H. Fischer complimented the gentlemen on the very excellent papers presented, but wished to emphasize some points made. He called attention to the experimental fact that animals could live with one-fourth of the kidney and remain perfectly well. We are endowed with four to eight times the excretory power in the kidneys to sustain life. Nephritis is a symptom of a general vascular disease, and when signs of a nephritis are present we also have changes in other organs due to the same etiological factor. Attention was called to the reason why we have a small urine output in one form of nephritis and a large urine output in another. Convulsions due to nephritis or Bright's disease coma is the same as in diabetes, and is etiologically due to the cerebral edema being greater than the blood pressure. Water is the principal diuretic, and functional tests are modified by the output of water, which water must be in excess of that necessary to supply the tissues.

Dr. E. W. Mitchell called attention to the necessity of getting a twenty-four hour specimen when making a urine test.

Dr. W. E. Kiely mentioned a case he refused for life insurance twenty-four years ago, who had just died of nephritis.

Dr. H. K. Dunham also discussed the paper.

Drs. McCaskey and Greiwe closed the discussion.

### Selected Articles

#### REPORTS ON THERAPEUTIC PROGRESS.

#### PITUITRIN AS AN OXYTOCIC.

In Le Scalpel of December 8, 1912, Clavier writes fully on this topic, reporting several cases. Thus:

CASe I-Madam L., aged twenty-two, primipara. Last period July 4, 19011. Pregnancy normal. Travail began April 12, 1912, at 5 p.m. Woman suffered greatly all through the night. April 13, examination revealed the cervix effaced, completely dilated, the anterior lobe alone being accessible; the summit further up was badly flexed. No contractions. Patient much exhausted. Pituitrin injection. At 12.20 labor pains began again with violent contractions; woman greatly agitated. Right episiotomy. 1.15, spontaneous expulsion of a boy; fifteen minutes after the expulsion of the fetus, normal delivery of placenta. Child-bed progress normal. In this case the principal fault lay in the absence of contraction during the expulsion period. This is one of the most frequent indications for the use of the forceps, and likewise that in which the administration of pituitrin is most clearly indicated and the results most appreciable. This procedure should attract the attention of accoucheurs, if for no other reason than that it presents none of the inconveniences of an obstetrical operation, such as is experienced by the use of the forceps, for example. In this, his first case, he saw what Holbauer justly terms a "tempest of contractions."

Case 2—Madam T., thirty-three years, secondipara. Labor began at full term, February 7, 1912, at 11 p.m. At 8:05 a.m. spontaneous rupture of the bag of waters. The midwife recognized an impacted breech presentation, not noticed before. The cervix was dilated to about the size of a silver dollar. At 7 c'lock, when he first saw the woman, dilatation had not progressed at all. During the examination not the slightest contractions were noticeable. Pituitrin injection. At 7:25 he noticed the return of

labor pains—these were, so to say, subintrant; at 8 o'clock the breech presented and was easily disengaged. A girl, weighing about 3 kg., was delivered at 8:20. Progress normal.

Obstetricians have always considered a breech presentation as unfavorable, requiring the most delicate treatment when the breech is fixed, even if not so much attached but that the fingers can reach the anterior groin. Thus, Pinard has suggested the prophylactic depression of the anterior feet when possible—that is, when the breech is not too much fixed. For such cases in which the feet can not be depressed and when interference is imperative, various instruments, unfortunately for the child, have been used, and these instruments are responsible for lesions of the soft parts and fractures of the femur, etc. This fact has led Fabre to say that the crochets should never be used except on a dead child. The advantage of pituitrin in such circumstances is easily seen. It was the first time that he tried the drug, and he was astonished at the action.

Case 3—Madame M., multipara. Slight laryngeal tubercular affection. Incessant vomiting and fever. General condition precarious. Five months pregnant. In agreement with Drs. Breyre and Reuleaux, it was decided to interrupt the pregnancy.

May 15, dilatation of the cervix with a Hégar bougie, followed by tamponment of the inferior segment and the cervical cavity with sterilized gauze soaked in glycerin. May 15 and 16, no pains; 17th, introduced a balloon de Champetier at 9 a.m. Noon, no contractions. At their suggestion, Dr. Reuleaux made an injection of pituitrin. Shortly after travail began, and at 1.15 the fetus was expelled. Progress normal, as far as the genitals were concerned.

Attention is called to the extreme rapidity with which this premature accouchement was accomplished a short time after the injection of the pituitrin, and at a period so far removed from full term. Some may say that the manipulation, tamponment, and introduction of the balloon contributed in a measure to this end, but not the slightest contractions were produced by these measures. The merit of pituitrin in all cases is to hasten an otherwise prolonged and tedious process. Certain authors admit that the

drug is less effective when the accouchement is so far removed from term. The above as well as the following instance merit consideration in this respect.

Case 4—Madame D., aged twenty-nine, secondipara. Last period November 12, 1911. April 30, began to lose blood. Rest in bed was ordered. Hydrastis. May 3, flow abundant, so that the patient had to remain in bed. May 6, the cervix was opened. Along the long and somewhat dilated cervix a small fetal particle (foot) was noticed. Cervicovaginal tamponment with sterile gauze soaked in glycerin. May 7, no contractions, tamponment renewed. May 8, at 4 p.m., serious hemorrhages. The cervix permitted the introduction of the index-finger. Injection of pituitrin. In about fifteen minutes labor began; at 6 o'clock (during the absence of Clavier) the fetus was expelled, followed a few minutes later by the placenta. Some loss of blood, the cause of which could not be determined. Normal recovery.

In this case the usual means for inducing labor were unsuccessful. The moment pituitrin was injected a discharge at once set in. Clavier asserts that prior to his acquaintance with this drug he should not have hesitated to adopt active measures on the third day—forcible dilation of the cervix, followed by no less forcible extraction of the fetus, and finally digital and instrumental curettage, all of which would no doubt in turn have given rise to more or less pyretic symptoms. He still has the sad recollection of such a forcible extraction of a five months' fetus (in 1910), assisted by a colleague, which nevertheless terminated in most grave septic results (suppurative pelvic peritonitis). After waiting three days in vain, after spontaneous rupture of the membrane, they intervened by attempting to induce labor by the use of laminal stem. A morning temperature of 37.8° decided them to hasten the deliverance.

Case 5—Madame S., aged twenty-three, primipara, very stout. Operated for a cold appendicitis October 23, 1911. Last period November 9, 1911. Beginning of labor August 19, 1912, at 9 p.m. August 20, 10 a.m., a few feeble contractions at long intervals; at 4 p.m., little progress, cervix dilated to about the size of a 50-cent piece, bag of water intact. Breech presentation. In-

jection of pituitrin. At 5 p.m. labor pains more violent. Spontaneous rupture of water; at 7 p.m., patient who was very nervous and at the end of her strength, begged for the application of forceps. By this time the cervix was completely dilated, and free at the summit. This mode of presentation, as well as the desire on Clavier's part to end the long wait—for he had been with the woman since 10 a.m.—induced him to intervene, and he is congratulating himself on having resorted to pituitrin. He agrees with A. Ross, who says: "We here have a preparation which saves the patient as well as the accoucheur long hours of waiting."

Using chloroform anæsthesia, which he entrusted to a most prudent and careful colleague, he made an internal version, introducing the entire left hand first on the summit of the right side, and after crossing taking the fronto-mastoidien. Incidentally, he states that he considers this mode of procedure less dangerous for the vagina than the "grand tour", when dealing with a posterior presentation in a primipara.

At 7:40 p.m., difficult extraction of a female child, about 3 kg., without perineal lesion. No unusual loss of blood. About 15 grammes of chloroform had been given, when the anæsthetist announced that the patient's pulse was gone. In spite of injection of stimulants—ether, caffeine, oil of camphor—this syncope lasted two hours, after which the pulse finally resumed and stood at 120. Clavier watched the patient until about 6 a.m.; she did not appear to be losing strength, and the retraction of the uterus was complete. The rapid pulse continued during the child-bed period, but there was never any temperature (maximum 37.2°). The woman nursed her baby. From time to time she gave some evidence of tachycardia, but no signs of heart affection or of Basedow's disease could be detected.

Clavier presents this case in detail because of the fortunate part played by pituitrin in bringing about the uterine dilatation, as well as the syncope which followed the accouchement, which the family attributed to the pituitrin. But he can not agree with them, because pituitrin is a heart hypertonic, and, moreover, the syncope occurred three hours after the injection. He can not, however, give any definite cause for the prolonged syncope.

The great value of pituitrin can thus be recognized in cases when it is desired to hasten the travail, such as in prolapse of the cord and in placenta previa.

Let us suppose a pregnancy close to term, with hydramnion. The travail has begun, the cervix is dilated to about the size of a silver dollar; the summit is mobile. Rupture of the bag of waters, with rapid discharge of amniotic, produces a prolapse of the cord. The cervix is successfully reduced, the pulse distinctly visible, but in order to avoid a new prolapse it is necessary to avoid a new prolapse it is necessary to fix the head. This is what pituitrin will do.

In placenta previa the question is no less interesting. Numerous publications have recently appeared on the treatment of this grave complication, and it was the order of the day at the Obstetrical and Gynecological Congress in Berlin in September, 1912. The French for the most part adhere to the old so-called obstetrical therapeutic rupture of the membrane (ballooning, or Braxton-Hicks version), while the Germans recommend surgical interference (Cæsarian, vaginal, classical, or extraperitoneal). The French with their procedure show a mortality for the mother of only 8.2 per cent (Coulevaire, and a fetal death-rate of 44 to 60 per cent. They regard their method as a sufficient means of combatting hemorrhage, the risk of death from which is small (1.2 per cent).

Haugh and Meyer have studied the value of pituitrin as an ecbolic against hemorrhage, and it is from their work that the following rules are taken, for certain conditions are required for a successful use of the drug:

- 1. The woman must not be too anemic.
- 2. Longitudinal presentation of the fetus.
- 3. There must be no mechanical disproportion.
- 4. Dilatation of the cervix sufficient to allow a wide rupture of the membrane.

Three failures in seven cases in which the remedy was used is the record, and one of these three was a case in which it was necessary to bring about a premature birth on account of a serious pyelitic cyst, and the other two were instances of placenta previa, in which the rupture of the membrane always makes the outcome uncertain. The results are, nevertheless, very encouraging, and it was deemed useful to publish them for the benefit of the practitioner.

The preparation is contraindicated:

- 1. With regard to the mother, when there is arterial hypertension, for we know that pituitrin increases blood-pressure. This hypertension in a pregnant woman causes what Bar terms eclampsia, and it is better not to use the drug in order to avoid such a contingency.
- 2. With regard to the fetal presentation, it is clear that the preparation is contraindicated when there is a certainty that the accouchement can not be accomplished with the force of the uterine contraction above. In a shoulder presentation, for instance, it would be a serious mistake to use pituitrin with a previous podalic version, but there is no danger after the version is accomplished if one wishes to avoid a too violent traction, which is a good practice.

When the child is large, and one wishes to determine a stricture (anteroposterior diameter  $7\frac{1}{2}$  per cent), a more adequate procedure is required, such as classic Cæsarian, pubiotomy, etc., or in the case of a dead child, craniotomy.

3. As far as the age of pregnancy is concerned, the action is doubtful in producing an abortion or merely a premature birth.

Outside of these restrictions, pituitrin is superior to the methods hitherto employed to induce or accelerate labor, whether mechanical, such as abdominal function, or warm vaginal injections, etc., or medical, such as lactose, sulphate of quinine, and ergot, happily now abandoned for this purpose.

Clavier heartily recommends his colleagues to profit by the marvelous action of pituitrin.—The Therapeutic Gazette.

#### Extracts from Home and Foreign Journals.

#### SURGICAL

THE TREATMENT OF HEMORRHAGIC CONDITIONS BY THE INJEC-TION OF HUMAN SERUM.

Dr. Roger Herbert Dennett read this paper for Dr. John Edgar Welch. Dr. Dennett said that the first case of this kind which he had seen seen with Dr. Welch was that of a child who had had a hidden meningeal hemorrhage and was practically moribund. He was six days old and the hemorrhage had been going on for three days. Six or eight hours after the injection of human blood serum the entire condition changed, just as had been described as taking place after a transfusion. Shortly after the second injection the child began to nurse again. Lumbar puncture had been done to confirm the diagnosis of hemorrhage and pure blood was withdrawn from the spinal canal. A second lumbar puncture the day after the injection of the human blood serum showed that no hemorrhage was taking place. Dr. Dennett said he wished particularly to mention this case because it had been said that desperate cases of hemorrhage should be transfused. Dr. Soresi had mentioned that there were two great advantages in transfusion, the cessation of bleeding and the formation of new blood. Even if it were claimed that all the serum did was to stop the bleeding (it was remarkable how quickly infants seemed to be able to add to their blood supply. Dr. Welch called particular attention to the use of the serum after the hemorrhage had ceased. The more experience they had the more they favored using the serum for four or five days after the cessation of the hemorrhage. The speaker cited a case in which after the serum had been employed for two days they thought the hemorrhage had ceased and discontinued the use of the serum; on the fourth day there was a recurrence of the hemorrhage and the child died in consequence. Had they followed the rule of continuing the use of the serum for four or five days the child might have been saved. Of

course, neither human blood serum nor transfusion could cure syphilic or septic infections, nor could these agents cure ulcers of the gastrointestinal tract. One could not expect human blood serum or transmission to act as a panacea for all hemorrhagic conditions, but until these conditions were better classified they must use the human blood serum or transfusion in all cases that came along. Dr. Soresi was so proficient in transfusion work that he felt sure that he had led them to believe that the technique was easier than it really was.—Medical Record.

#### Hyperthyroidism Precipitated by Iodine.

Gastro-enterostomy was done for obstructive gastric cancer, the skin being disinfected with iodine. The patient was a woman aged 64, with a small elastic left-sided goitre which had never given symptoms. On the third day the pulse gradually rose to 180 and reached 200 on the fourth. Other but not all signs of Graves' disease were present. Death occurred on the nineteenth day, although digalen has temporarily brought the pulse down. The heart was slightly dilated, flaccid, and there was a small embolus in the right pulmonary artery. Iodine was absent in the urine from the 7th to the 10th day, present from the 11th to the 15th.—Buffalo Medical Journal.

#### Quinine Anaesthetic.

In operations upon nose and throat in children or individuals who show an idiosyncrasy toward cocaine, Chavenne employs the following formula:

Phenolis	2.0	grams
Mentholis	2.0	grams
Quininæ hydrochloridi	1.5	grams
Adrenalin	0.005	gram

This will form a syrupy fluid, which when applied in small amounts upon mucous membranes will give rise to a satisfactory anæsthesia. Cauterizations and small operations can be per-

formed without any pain. The combination is not caustic, since menthol is known to counteract the caustic properties of phenol. The presence of quinine considerably increases the anæsthetic effect, though quinine alone was unsatisfactory.—Klin. Therap. Woch.

#### SURGICAL TREATMENT OF TROPICAL DYSENTERY.

Dr. O. Muller reports four cases of appendicostomy for dysentery, two of amœbic and two of bacterial character, in all of which marked improvement or a cure resulted. He regards appendicostomy as less dangerous and more reliable even than high irrigation in cases of ulceration of the bowel. He prefers a transverse to a lateral incision along the sheath of the rectus. For the success of the operation it is necessary that the appendix should be sufficiently long and movable, though adhesions may be separated and the mensenteriolum detached to enable the appendix to be sutured in position without undue traction. It is important, however, to avoid separating the entire mesentery, as this might lead to gangrene of the stump. Muller also advises that before suturing the appendix to the abdominal wound a catheter should be inserted and a test irrigation made. If this be omitted the surgeon may be in the unpleasant predicament of overlooking an occlusion of the appendical lumen. If a stricture should be found or the presence of other severe destructive changes be detected, it is better to dispense with appendicostomy and replace it by cecostomy. The latter has the great advantage that through the formation of an artificial anus the entire colon is placed at rest. On the other hand, it has the same objectionable features belonging to an artificial anus.—Journal of Surgery.

#### THE TREATMENT OF METATARSALGIA.

Morton's disease or metatarsalgia, is a not infrequent orthopedic condition, met with in general practice, characterized by more or less acute cramp-like pains occurring at the base of the third or fourth toes. The pain comes on suddenly during the use of the foot and may be very severe. It is often accompanied by a snapping of the bones. A sense of soreness or numbness remains after the attack is over. The etiological factor seems to be a mechanical one; the lateral pressure of the head of one metatarsal bone below and against the neck of the neighboring metatarsal bone results in an undue pressure upon the superficial branch of the external nerve and its digital branches, which are squeezed between the two bones.

Attempts have been frequently made to alleviate the condition by correcting the flat-foot, which not infrequently is associated with the metatarsalgia, and also by fitting a metal plate with a gradual dome raised to fit in behind the head of one of the offending metatarsal bones. More rarely a division of the superficial branch of the external plantar nerve or the resection of one of the heads of the metatarsal bones has been employed to relieve an obstinate case.

T. P. Low (Brit. Med. Jour., March 15, 1913), treats metatar-salgia by grasping the affected foot with the hands, one on either side, and forcibly moving the metatarsal bones upon each other, and then forcibly flexing and extending the toes and foot. In this way any existing adhesions may be broken up. Low claims that in the few cases in which he has tried this simple form of treatment, all have responded well and the relief has been permanent. Shoes of proper width should be worn after an attack to avoid compression on the front of the foot.—Medical Review of Reviews.

#### TRAUMATIC HEMORRHAGE AND ATROPINE.

A noted Chicago lawyer gave himself a bullet wound in the chest. A consultation of prominent physicians was held, but the man died, before their eyes, of internal hemorrhage.

In a neighboring city a prominent man inflicted on himself a pistol-bullet wound in the chest. A consultation of prominent doctors was held and all agreed that nothing could be done, that the wound was necessarily fatal. A young interne requested permission to make a trial. He gave the dying man rapidly repeated doses of atropine until his face reddened, stayed all night, keeping up the action—and the patient recovered.

Atropine was not employed in the first-mentioned case. Several hours elapsed after the wounding before the end came, time enough to show that the bullet did not sever a vessel of primary caliber. The physicians in charge undoubtedly knew nothing of this unique application of atropine. They knew of the active-principle movement only through the attacks of its enemies.

The youthful hospital-physician who won such a distinguished triumph over his elders had really been instructed in correct modern therapeutics.—The American Journal of Clinical Medicine.

#### RENAL TUBERCULOSIS.

Rafin has made a careful study of 160 case histories, these patients having been subjected to primitive nephrectomy because of renal tuberculosis with the idea of determining what symptoms first called attention to the abnormal condition of the kidney. He notes that vesical symptoms were those which first attracted the patient's attention in over 60 per cent of the cases, renal symptoms in about 20 per cent. Only 2.5 per cent exhibited early marked impairment in general health. Changes in the urine, such as albuminuria, turbidity, or hematuria, were the first to attract attention to the abnormal condition in less than 10 per cent. As to urinary changes Melchoir has long since announced that the urine of patients subject to urinary tuberculosis is usually aseptic, from which follows the dictum commonly accepted that a sterile purulent urine is almost certainly tubercular. Rafin has corroborated this views, contested by Albarran; from 239 examinations he obtained positive cultures in 71 cases; usually it was staphylococcus. Of these 71 infections 37 were due to anterior catheterization and 9 to an accompanying blennorrhagia. Hence there remain but 25 cases in which the exogenous nature of a mixed infection was proven. Moreover, in probably the majority of these 25 cases an exogenous cause is not improbable. Hence it apparently remains true that an aseptic pyuria indicates tuberculosis. Incidentally it seems clear that all intravesical manipulations under such circumstances should be avoided unless positively indicated, and should then be conducted with the utmost precaution.—The Therapeutic Gazette.

#### DESICCATION AS A THERAPEUTIC MEASURE.

Drying probably does more toward limiting the spread of contagion than any other agent save oxygen and light. It acts in at least two ways: By simple dehydration of the protoplasm of bacterial cells life becomes extinct because of disintegration of the proteid. Again, by dehydrating the media in which such bodies live, as culture media, blood-serum, pus, and other fluids, infection is resisted because of the interference with growth, motility, and migration of bacteria.

Quite a school of surgery has developed about the dry treatment of wounds. Good surgeons will never wash a clean uninfected incision when dressing it, not even moistening the gauze to loosen it from the wound. Burns are best treated by dry methods.

If moist measures, such as compresses, oils, etc., are used, infection is more liable to occur, with ulceration, scarring, and a whole chain of ills that follow in the wake of infected burns.

Dry methods in the treatment of ulcers are among the best employed. Simply keeping a leg ulcer exposed to the air, lightly dusted with aristol and stearate of zinc, is a most effective way to treat it, especially if the patient will lie down and elevate the leg and protect it from flies and dust with a diaphanous layer of gauze.—Therapeutic Gazette.

#### **OBSTETRICAL**

GYNECOLOGICAL HINTS—CANCER.

If carcinoma of the uterus is to be cured an early diagnosis must be made, and for this reason women should be thoroughly examined whenever there are symptoms referable to the uterus, especially if there is a vaginal discharge with or without hemorrhage.

Young as well as old women may have carcinoma of the uterus. Enough stress has not been laid on this fact, and the disease has been allowed to reach a point in the former where no benefit could be obtained from an operation.

Carcinoma is much more frequent in the cervix than the fundus uteri, but when it originates in one portion of the uterus it usually extends slowly to the other.

All granulations scraped from either the fundus or cervix should be subjected to a careful microscopical examination.

Probably at least 90 per cent of all cases of carcinoma of the cervix start at the site of an old laceration, and it is good practice when operating for such a laceration to have the removed material examined microscopically. In many instances cancer will be found where you least expect it.

A persistent watery discharge from the cervix, though the amount may not be large, is always suspicious of carcinoma of the fundus, and it is especially so if at times it is streaked with blood, or there is a slight increase in the menstrual flow. If a woman has passed the menopause and the above symptoms appear, malignant disease is almost invariably present.

The only treatment for early uterine cancer is hysterectomy with extensive removal of the neighboring cellular tissue, tubes, ovaries and upper portion of the vagina. It is of no benefit to remove glands that are remote from the uterus.

A tender tumor of the ovary, accompanied by severe pain that is persistent and associated with every little if any rise intemperature, is very characteristic of malignant disease of the ovary, especially sarcoma.

Inoperable carcinoma of the cervix can be very materially benefitted by the thorough use of the actual cautery. If the lower portion of the vagina and external parts are not injured, no pain will follow its use.—International Journal of Surgery.

#### ABDERHALDEN'S BIOLOGICAL TEST FOR PREGNANCY.

According to Abderhalden's observations, the development of a placenta causes the appearance of a foreign protein in the mother's blood. The test is based upon the assumption that a protein, foreign to the blood, will induce therein the development of an enzyme, capable of splitting such foreign protein.

Two methods of making the test have been described. first method depends upon a change in the optical characteristics of the serum after it has been allowed to remain in contact with peptone prepared from placenta or with a preparation of the boiled placenta. Such change is noted with a polariscope. Williams and Pearce (Surgery, Gynecology, and Obstetrics, April. 1913), find this method objectionable and have employed another method in a series of tests. They use the technique as recommended by Abderhalden i. e. the transformation of the protein of the placenta which is recognized by certain color reactions. after dialysis. The method of performing the test is as follows: Fresh placenta free of all soluble protein is added to serum and placed in an animal membrane. This membrane must be permeable to peptones only. The membrane is then placed in a beaker of water, and after 16 to 24 hours the dialysate is tested for peptone or amino-acids. Triketo-hydrindenhydrat (Ninhydrin) is used as a reagent and a deep blue color results if the reaction is positive.

In 36 cases the test has always been positive in a known pregnancy. They have found, however, that the serum of pregnancy reacts with tissues other than the placenta, and in addition have obtained the reaction in cases of nephritis, tabes and infection, and in some individuals apparently in perfect health. Their latter findings, of course, eliminate the present test as an accurate clinical test of pregnancy. McCord, however, in the same journal,

basing his observations on 240 tests, concludes that this method of sero-diagnosis, is both reliable and practical.—*Medical Review of Reviews*.

#### POSTMORTEM RESULTS OF AMPUTATION OF CERVIX.

An analysis of 128 cases reported by Leonard shows that hemorrhage after amputation of the cervix is not uncommon (5 per cent), and may occur weeks after operation. Cases of late postoperative hemorrhage are due to infection rather than faulty suture of the cervix. After amputation of a diseased cervix, 90 per cent of the patients show noticeable improvement in general health. Persistent leucorrhea of cervical origin is cured in 60 per cent of cases and improved in 30 per cent. About half the patients experience less menstrual pain after the operation. Fourfifths of the women remain sterile after operation; yet in certain selected cases of persistent sterility amputation of the cervix seems to be the only practicable procedure. This postoperative sterility is probably mechanical in origin, and may be due either to a narrowing of the external os through encroachment by the edges of the vaginal mucosa or to a stenosis of the cervical canal. Consequently, on the iris-like contraction of the citatrix which invariably follows the operation. A pregnancy following amputation of the cervix has not more than an even chance of progressing to full term, in which event serious dystocia due to cicatricial rigidity, follows. It is the operation of choice in elderly women, but this procedure should be applied to those in the child-bearing period, only when more conservative methods of treatment, such as Hunner's linear cauterization or thorough curettage of the cervix have failed.-New Orleans Medical and Surgical Journal.

#### SIGNIFICANCE OF ALBUMINURIA IN PREGNANCY.

H. Williamson concludes that condition of acidosis is found constantly in cases of pregnancy toxemia when the lesions are of

a certain grade of severity, and is not found in cases of chronic nephritis even when the symptoms are severe; and, further, that the onset of an acidosis in the course of a chronic nephritis may be interpreted to mean that toxemia has been added to the existing lesions. The author has been disappointed to find that these tests have failed in the earlier and slighter cases; in a number of instances he could find no evidence of acidosis, and in several instances in which the symptoms passed away under treatment the ammonia-urea co-efficients remained normal, and acetone and diacetic acid were never demonstrated in the urine. In spite of this, however, the tests are of real clinical value. The author does not believe that the symptoms are due to the acidosis; indeed, these results definitely disprove this theory, because the symptoms are often present in a mild form before one can find any evidence of acidosis, but the results of treatment indicate that if one diminish the acidosis the severity of the symptoms will be alleviated. In severe cases of eclampsia improvement follows an intravenous infusion of solutions of sodium acetate and sodium bicarbonate. Some important point in treatment are emphasized: (1) In cases of pregnancy toxemia chloroform should never be administered, because the action of chloroform is to render more grave the lesions which already exist and to increase the acidosis. Ether administered by the open method is in every way preferable as an anæsthetic. (2) Calomel should not be used as an aperient, for the lesions in the liver and kidney produced by mercurial poisoning are of the same nature as those of pregnancy toxemia, and it is probable that mercury even in small doses will increase the gravity of the lesions already existing. (3) For a similar reason douches of mercurial antiseptics should never be employed. (4) In all cases in which an acidosis is present an intravenous infusion with a solution of sodium bicarbonate or sodium acetate should be practiced. (5) The fat metabolism should be spared as far as possible by the administration of glucose. The author's practice has been to administer it by the rectum when vomiting is present and to give it by the mouth in the form of glucose lemonade where the digestive functions are not deranged. (6) When a pregnant woman suffering from chronic nephritis shows

evidence of the existence of acidosis, the uterine contents should be evacuated without delay, for with a kidney previously damaged the prognosis of pregnancy toxemia is very grave.—*Medical Record*.

#### PREGNANCY AND TUBERCULOSIS.

Emphasizing the necessity for the ingestion of as much food as the patient can bear in cases of tuberculosis with pregnancy where it is decided not to empty the uterus, the author states that, if the patient is not prejudiced against wine, manzanilla, a light, bitter sherry, which must be imported already bottled from Spain. will cause, he has found, a very marked increase in the patient's appetite. He prescribes a combination of lysol, 1 part; ichthyol, 10 parts, and glycerin, 20 parts, with the wine in addition. This will generally cause the patient to gain 20 ounces a week. best mode of administration is to begin with 1 drop of the lysolichthyol mixture, and increase by 1 drop at each dose until 30 drops are attained, when the amount is kept at this figure. The preparation is dropped into a half-tumblerful of water and taken just before meals. By virtue of the resulting superalimentation, the author believes that the danger of fatality from pregnancy in these cases can be reduced to about 60 per cent. Still safer, however, is to empty the uterus promptly.—D. H. Stewart (Medical Record, November 16, 1912.)

#### MEDICAL

#### VIKING VITALITY.

Professor Zetius seems to be greatly perturbed about the fate of the blonde race. Although the fair, blue eyed dolichocephalic type has been recognized as an anthropological incident for some fifty years, it is only lately that the problems presented by these people have attracted serious attention. We know that they were evolved in the cold dark cloudy places of the earth, and they can

not move too far from their place of origin without paying the penalty. City life destroys them and they can not work in factories. The boundless space of the earth and sea nourish them; they crowd on ships and in the armies of the north in their efforts to breathe the untainted air that is the very breath of life to them as it was to their Viking forebears. These facts have a direct practical value. We must remember that where change of environment may be beneficial to the pigmented city-dweller it may be an absolute necessity to the blond Aryan in, for instance, cases of incipient tuberculosis. The fair-haired race is here amongst us and demands special treatment, which at present it does not get. The insurance companies could help us greatly by their mass of statistics, but up to the present they do not seem to have recognized even the existence of our fair-haired sojourners.—

The American Practitioner.

#### X-RAY INJURIES NOT AN ACCIDENT.

A writer in the Augsburger Postzeitung notes the case of an electrician who was employed for fifteen years in the x-ray room of an orthopedic clinic and had suffered from a chronic affection of the skin of the hands and face resulting from constant exposure of the rays. He was finally incapacitated, and applied to his trade union for the indemnity for accidental injury during employment. The union refused such indemnity, stating that the injury complained of was not due to any accident, but was really an occupational disease, not to be indemnified according to the terms of insurance. An appeal to the courts was decided in favor of the union's interpretation of the agreement.—Zeitschrift für Versicherungs Medizin, Vol. V, No. 12.

#### CAMPHOR IN THE TREATMENT OF PNEUMONIA.

Pneumonia, called by Osler a self-limited disease against which no method of treatment is of any avail, is, in the experience of very many able and observant practitioners, one of the most amenable to proper treatment, except in the rare cases of massive infection, of all the infectious diseases. Forty years ago James R. Leaming proclaimed the curability of pneumonia by a massive dose, twenty grains and more, of calomel—an early and empirical application of Ehrlich's theory of therapia magna sterilisans. He practiced what he preached, for when he himself was attacked with the disease he took calomel—and recovered. Ten or fifteen years later Andrew H. Smith and others demonstrated the value of the salicylates and of creosote carbonate in the specific treatment of pneumonia.

Some years ago August Seibert of this city published a reprot of a number of cases of pneumonia treated by hypodermic injections of large doses of 20 per cent camphorated oil, and also gave the results of a number of experiments with camphor injections in rabbits previously inoculated with cultures of the pneumococci. These reports were published in the Münchener mediziniche Wochenschrift, No. 36, 1909, and in the Medical Record. April 20, 1912. Seibert's observations have been confirmed recently by Leo. of Bonn in two communications to the Deutsche medisinische Wochenschrift, Nos. 13 and 15, 1913. In the first of these the author says that the experiments thus far made in cases of pneumococcus infection indicate that "camphor has a specific action against pneumonia," and in the second he quotes from Ehrlich to the effect that Böhnke, experimenting on mice in the institute at Frankfort, had succeeded in curing pneumococcus infection by subcutaneous injections of camphor oil. Iverson, also, writing in Vratch of January, 1912, reported good results with injections of 20 per cent camphor oil, and noted that the toxemic symptoms were markedly ameliorated in all cases, even in the alcoholics and in those who finally succumbed. These observations of Seibert, confirmed by workers in Bonn, Frankfort, and St. Petersburg, the favorable results obtained by Wright in the use of mercury succinimide (Medical Record, June 1, 1912) and the earlier successes with creosote carbonate, the salicylates, and calomel should suffice to down the pessimism which so long dominated the therapeutics of pneumonia and other infectious diseases, but which is now disappearing along with the dving school of therapeutic nihilists.—Medical Record.

#### TOADS AND WARTS.

We have all heard the old grannies say that warts were due to handling toads, and have laughed at the notion. Quite a long time ago we disproved this statement by personal experiment, but we also proved that rhus toxicodendron was harmless-to the same subject of experiment. In the light of recent discoveries showing the presence of an irritant poison-buffoin-in the skin of the toad, and a similar one in the frog, we are rather inclined to place some credence in the toad theory of the production of warts. Caspar and Loewy have reported that the arrow poison of the Indians of Columbia is derived by pricking the skin of a frog. This poisoning paralyzes the animal shot and enables him to be captured even if slightly wounded. Now don't understand us to claim that all warts are due to handling toads, or frogs, nor that every child handling a bactrian develops warts. But papillomas generally are due to irritation, perhaps especially of a chemic nature. Warts are undeniably more common in country dwellers than in city dwellers, they are more common in the summer than in the winter, though often persistent, they are more common in the young and rarely affects adults who are careful as to their hands. We suggest that, this summer, our readers investigate the etiology clinically, with a view to determining how far exposure to various irritants is operative, and with particular attention to the toad theory and to ascertain other potential causes.—Buffalo Medical Journal.

#### A STUDY OF THE RESPIRATION AND CIRCULATION IN EPILEPSY.

Pollock and Treadway (Archives of Internal Medicine, Vol II, No. ), conclude as a result of the study of forty-four cases by graphic methods that in these cases:

- 1. There are present in many cases of epilepsy rythmical variations of blood-pressure other than those due to respiratory movements.
- 2. The sequence of events relative to a convulsion is as follows: A preliminary rise in blood-pressure followed in series by a sud-

den drop of blood-pressure, a period of apnœa, and then the convulsion.

- 3. The blood-pressure was relatively low during convulsions of petit mal type and during some of the corresponding period of the fits of the grand mal type.
  - 4. The pulse was rapid during the convulsion.
- 5. A study of the changes in the respiratory and circulatory systems in some of the cases of epilepsy suggests that the site of discharge is in the medulla and pons (the "lowest level of fits" of Hughlings Jackson). Likewise it points to the medulla as participating in the discharge in all cases of epilepsy whether this discharge originates there or not.—New Orleans Medical and Suggical Journal.

#### PANCREATIN IN ANEMIA.

The Therapeutic Record states that in an article which appeared in Deut. Med. Woch. a short time ago, by Brieger, is given that author's treatment of pernicious anemia. Brieger had found that in many cases of cancer, both operated and non-operated, by giving pancreatin internally he could bring down the high antipyretic index to normal, and there was a corresponding improvement in appetite, general condition and weight. But in some cancerous patients the influence on the index was an opposite result. It was then suggested that for tuberculosis one might combine the pancreatin cure with the tuberculin cure. In the past three years Brieger has also applied this idea to the treatment of pernicious anemia. In combating pernicious anemia he employs a combination of pancreatin and arsenic. The arsenic is given as Fowler's-two drops three times a day, to be increased and then diminished in the usual fashion. The pancreatin was given three times daily, before meals—the quantity as much as can be retained on a knife blade. Three cases of pernicious anemia treated in this manner made rapid and most marked improvement.—The Medical Brief.

#### Hyperidrosis of the Feet.

According to Saalfeld, most cases of this disagreeable complaint can be cured or ameliorated by soaking the feet for ten minutes, night and morning, in a warm creolin bath, one drachm of creolin to one gallon of water. The feet are then thoroughly dried and the following ointment applied:

#### R Creolin.

Hydrarg, Ammoniataa.	.2
Acid salicylic	.6
Paraffin	32

For inflamed acute cases, a milder ointment must at first be employed. The patient's stockings should be changed at least twice a day and should be first soaked in a three per cent boracic acid solution and then dried before wearing.

In order to remove the disagreeable odor from the boots, they are filled a few hours before using with a solution of formalin, one tablespoon to one quart of water.—Med. Review of Reviews.

#### TREATMENT OF SMALLPOX BY TINCTURE OF IODINE.

Pedley writes in the *Indian Medical Gazette* for November, 1912, on this topic.

While seldom having the chance of treating a case of smallpox, Pedley had been on the lookout for an opportunity of using iodine, for he felt that its penetration of the thin covering of the vesicles would have the effect of destroying the activity of the microörganisms contained in their lymph.

On the first appearance of the spots he painted them whenever they occurred with equal parts of tincture and liniment of iodine. After three days he changed this to the tincture alone, using it twice a day. The rash was profuse on the face, chest, arms and hands. The patient found the application of the tincture cooling and grateful, and asked for it to be repeated. It was kept up for six days. The result was remarkable. There was no itching, no discomfort, and no secondary fever whatever; the vesicle col-

lapsed and shriveled; the cuticle peeling off left a clean, white surface, quite free from marks or scars.

While he believes that the course and severity of smallpox may be much modified by keeping down the fever by the thorough and continuous use of cold water, he feels sure that in the application of tincture of iodine we have a most valuable remedy.—

The Therapeutic Gazette.

#### THE LETHAL DOSE OF CORROSIVE SUBLIMATE.

Almost always when a physician is called to testify in a court of law in a case of poisoning he is asked by one of the attorneys, or by the judge, "what is the lethal or fatal dose of the poison under consideration?" and not infrequently the legal mind finds it difficult to understand why the physician can not name a definite or fixed amount of a well-known toxic agent.

There are, of course, many reasons for this aside from the difference in susceptibility of the individual. Much depends upon the rapidity with which the absorption of the drug has taken place, and this in turn depends upon the activity of the circulation, the competency of the stomach to perform its functions, and whether the poison is diluted by considerable quantities of food and drink. For this reason all those who are acquainted with toxilogical literature know that the lethal dose of death-dealing drugs must vary in each individual case, in some instances an amount scarcely larger than that sometimes employed for medicinal purposes acting as a poison, and in other instances very large doses being taken without the production of very dangerous symptoms.

An illustration of this is afforded by a report made to the *British Medical Journal* of January 18, 1913, by Fuller, who records the case of a man eighty-five years of age, who swallowed by mistake 8¾ grains of bichloride of mercury. The patient at once recognized his error and drank a tumblerful of barley water. Seen by his physician half an hour later he was given white of egg, and when he retched he brought up blue-stained mucus from the indigo in the bichloride tablet. The stomach tube was then

passed and the stomach washed out with large quantities of albumen water and milk and water. There was an urgent desire for the bowels to move, but very little more than mucus was passed. The patient became extremely collapsed, was cold and pallid, and the pulse was almost imperceptible. Strychnine was given hypodermically and milk and brandy by the mouth. The next morning he was somewhat better, but was still in a very critical condition, and for several days the bowels continued to be very irritable, but his general condition improved. We are told that after a slow convalescence he quite recovered from the effects of the poison. Fuller points out that while other cases have been recorded in which recovery followed an even larger dose, nevertheless an instance is reported in the British Medical Journal for 1905, Volume I, in which a dose of 21/2 grains was swallowed and death ensued in three weeks from the diarrhea which was induced. The fact that recovery took place in a man of eighty-five years is also of interest.—The Therapeutic Gazette.

#### HIGH ALTITUDES AND DIABETES.

Dutoit mentions the clinical fact that high altitudes exert a favorable influence on diabetes and adds that thus far no satisfactory explanation of this sequence has been forthcoming. One authority attributed the benefit to chalybeate waters (at St. Moritz), while others give the credit simply to physical exercise and out-of-door life. The assertion has been advanced that mountain dwellers do not suffer from diabetes, and statistics show that in the mountain cantons of Switzerland the number of deaths from diabetes is much below the average. Recently Hoessli and Wanner have each seen in this phenomenon evidence that the rarefied air is a stimulant of carbohydrate oxidation. Hoessli saw a complete recovery of a patient with chronic diabetes. It does not appear that any diabetes have yet been submitted to calorimetric tests, but high altitudes are known to bring about increased oxygen consumption and carbon dioxide elimination.-Deutsche medizinische Wochenschrift.

ASTHMA, TREATMENT OF BRONCHIAL.

The use of epinephrin in a fine spray, to be inhaled by the patient, is advocated by the author in asthma. He has devised a small atomizer, suitable for carrying around in the pocket, and with which the patient can arrest a paroxysm whenever he feels it coming on. The ordinary 1:1000 solution of epinephrin is placed in the atomizer, and upon pressing the bulb is broken up into a spray so fine that it can be driven through a narrow tube coiled on itself. This fine division is essential, if the remedy is directly to reach the bronchioles, which it tends to dilate. In established severe attacks, the following combination is recommended: Epinephrin solution, 9 c.c.; atropine sulphate, 0.01 gm.; cocaine hydrochloride, 0.025 gm.; distilled water, 1 c.c. No ill effects were ever observed from the spray. The action of epinephrin thus administered appeared to be of greater duration than where larger amounts were injected hypodermically. The intervals between attacks were prolonged and the attacks themselves rendered less severe.—Monthly Cyclobedia.

# Editorial

Publisher's Notice—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail. either by money order, draft, or registered letter, should be addressed to the Business manager, C. S. Briggs, M. D corner Summer and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

#### EUGENICS.

The study of eugenics is becoming more widespread, the fight against immorality and the White Slave Traffic more aggressive. We naturally wonder what will be the result, inasmuch as any steps tending to prevent marriage will naturally add to the difficulty in abolishing the White Slave evil. In view of the high cost of living, marriage is difficult enough now for the average young man. The health certificate will add to the present difficulties and the ranks of those that help support the White Slave traffic will increase in almost direct ratio to the number refused marriage on account of disease.

As physician and student of sociology we can see the wonderful fruits of eugenics almost as if they were already ripened, but as students of human nature and as moralists we fear the good produced along the one line will result in concomitant evil along the other. In other words the man who is refused marriage because of syphilis, tuberculosis or what not, will often enter upon a life wholly contrary to his nature so long as he felt that some day he could marry.

Eugenics can and should be applied in prisons and optionally in society. The habitual criminal should have a vasectomy or salpingectomy performed, which, of course, will not prevent later marriage. The mentally or physically diseased man applying for a marriage certificate should, in the presence of his fiancee, or better, through a physician in touch with both of them, have a

vasectomy proposed, but we hardly think the State has a right to compel such an operation and in lieu of it refuse marriage.

Likewise, women suffering from any mental disease or any disease or condition which might render child bearing difficult, dangerous or impossible, should be given the opportunity after full knowledge to have an operation producing artificial sterility performed. Here is an opportunity for the husband-to-be to show his love and devotion by insisting on his having the operation in order to save his wife the danger, which indeed is really greater for the woman than the man.

In any event the operation, whether compulsory or optional, should be paid for by the State inasmuch as the State will be the beneficiary in the end.

#### A TIMELY GIFT.

The recent gift of \$1,000,000 to the Vanderbilt Medical School by the great philanthropist, Andrew Carnegie, was, to say the least, timely. Since its separation from the University of Nashville Medical Department, the Vanderbilt Medical School has struggled manfully, and successfully, too, to maintain its position among the best schools in the country. The fight has been hard and was becoming more and more serious, the outcome more and more dubious, as the standards were annually raised by the American Association of Medical Colleges. These standards had already reached the point where Vanderbilt could reach them only by tiptoeing, and so it was merely a question of time before the strain would tell and the Vanderbilt Medical School, without endowment, would have to join the ranks of those school which have been but are no more. This strained position became even more serious and the outcome even more dubious when the University of the South announced the reopening of their medical department with the required quota of full time professors and ample endowment to insure a class A school. And though we have great faith in Vanderbilt—her chancellor and medical faculty-we would not have dared predict her prosperous future

against such odds. However, this timely gift of Mr. Carnegie removes the strain and we are sure that the future will but show that the Vanderbilt Medical School has attained that which she has always deserved. And in view of this gift we can not help but feel that another medical school in this city is superfluous and ill-advised to say the least.

Since writing the above, announcement has been made that the University of the South will abandon the idea of opening a medical school.

#### DR. TOM A. WILLIAMS.

Our esteemed contributor, Dr. Tom A. Williams, sails June 28 to attend the meetings of the British Medical Association and the International Medical Congress. His address will be, while in London, Royal Society Club, St. James W, where he will be glad to receive friends. The Journal hopes to hear from him while he is abroad.

W. B. Saunders Co., publishers of Philadelphia and London, have issued another edition (17th) of their handsome illustrated catalogue. In going through this edition we find it describes nine new books and ten new editions, not described in the previous issue. These new books are of great interest to the medical man, because they treat of subjects being daily discussed in medical circles. Any physician can get a copy of the Saunders' catalogue by dropping a line to these publishers. A copy should have a place on the desk of every physician, because it is most valuable as a reference work of modern medical literature. Send to Saunders today for a copy.

#### DENTAL INTERNE (MALE).

The United States Civil Service Commission announces an open competitive examination for dental interne, for men only, on June 4, 1913, at the places mentioned in the list printed hereon. From the register of eligibles resulting from this examination certification will be made to fill a vacancy in this position at \$600

per annum, with maintenance, in the Government Hospital for the Insane, Washington, D. C., and vacancies as they may occur in positions requiring similar qualifications, unless it is found to be in the interest of the service to fill any vacancy by reinstateent, transfer, or promotion.

The Department states that it reserves the right to terminate the appointment at the expiration of one year of service if it is deemed advisable to do so.

As no applications were filed for the examination for this position announced to be held on April 2, 1913, qualified persons are urged to enter this examination.

In addition to the many interesting cases presented, the dental interne is given an excellent opportunity for study and for doing experimental and research work in the pathological, histological, and other laboratories of the institution.

Competitors will be examined in the following subjects, which will have the relative weights indicated:

	Subjects	Weights
	Letter writing (the subject matter on a topic relative to the practice of dentistry)Anatomy and physiology (general questions on the	5
	branches, also with special reference to the teet mouth, and head)	h, 10
	Chemistry, materia medica, and therapeutics (the preparation, properties, and reactions of chemcials, cruc drugs and their preparations, their action and application, with those of other therapeutic agencies)——Dental pathology and oral surgery (the morbid processes incident to diseases and injuries of the teetl mouth, and contingent structures, and their surgicatreatment)	le i- 15 o- n, al
5. (	Operative and prosthetic dentistry (the detailed technics of general and special operative and laborator work)	n- 'y
6. I	Bacteriology, histology, and hygiene (the cultivation isolation, demonstration of bacteria, the principles of	1,

sterilization, mounting specimens, use of microscope, the principles of general and oral hygiene, etc.)  7. Orthodontia (local and constitutional irregularities in growth and development o fthe teeth, and their cor-	10
rection)	100

Applicants are required to be graduates of regularly incorporated dental colleges, and applications will not be accepted from persons who have been graduates more than two years.

Statements as to training, experience, and fitness are accepted

subject to verification.

Applicants must be unmarried.

Age, 20 years or over on the date of the examination.

This examination is open to all male citizens of the United States who meet the requirements.

Persons who meet the requirements and desire this examination should at once apply either to the United States Civil Service Commission, Washington, D. C., or to the secretary of the board of examiners at any place mentioned in the list printed hereon, for application and examination Form 1312. No application will be accepted unless properly executed and filed with the Commission at Washington. In applying for this examination the exact title as given at the head of this announcement should be used.

As examination papers are shipped direct from the Commission to the places of examination, it is necessary that applications be received in ample time to arrange for the examination desired at the place indicated by the applicant. The Commission will therefore arrange to examine any applicant whose application is received in time to permit the shipment of the necessary papers.

Issued April 29, 1913.

THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

The Panama-Pacific International Exposition at San Francisco in 1913 will display in a most comprehensive manner the

achievements and activities of mankind during the last decade. Live, working exhibits are especially desirable, showing not only actual products, but also models in operation to illustrate the apparatus and methods employed in arriving at the finished article. In the domain of Liberal Arts the exhibits will be notably interesting and significant.

The wonderful developments in Medicine and Surgery make certain a display of the highest importance and which will be of great benefit to the human family. The mechanical side of surgery will be represented by a complete collection of instruments and appliances used in this important field of human endeavor. There will be shown the most intelligent modern methods employed in the prevention and mitigation of the ills which beset mankind.

These exhibits will be housed in the Palace of Liberal Arts. The exhibits must of necessity be selective in character because of the comparative limitation of space which, by reason of wider participation and the world's more extended productivity, will be more restricted than at previous International Expositions. This will emphasize the advisability of applying for exhibit space as soon as possible.

We should be pleased to know that you will give serious consideration to the desirability of your participation. In this connection permit me to call your attention to the keen interest manifested by both American exhibitors and Foreign Governments, which assures an exposition of the most representative international character. Latin America and the Orient will take very prominent parts. Twenty-six foreign countries have already accepted the invitation of the President of the United States to participate, and thirty states have also accepted.

The opening of the Panama Canal means the development of entirely new avenues of commerce, the extent of which it is impossible to overestimate. The Orient and Latin America should prove large and profitable markets for the appliances and equipment of Medicine and Surgery, and the Universal Exposition at San Francisco in 1915 will afford a rare opportunity to bring your products to their particular notice.

Blank applications for space, the exhibits classification and other information prepared for the guidance of exhibitors, will be forwarded on request.

The Travel Study Tour of American Physicians to the Seventeenth International Congress of Medicine will sail from New York on July 3, on the North German Lloyd steamship "Bremen". About 75 physicians will participate in this tour, the chairman of which is Dr. W. B. DeGarmo, New York City; Secretary, Dr. Richard Kovacs, 236 East 69th St., New York. In cooperation with the International Committee of Postgraduate Medical Education, arrangements have been made to visit clinics and hospitals at Paris, Munich, Vienna, Dresden, Berlin, Cologne, Brussells, etc., and inspect the health resorts of Carlsbad, Marienbad, Nauheim, Homburg, Wiesbaden. No American party ever enjoyed similar privileges. The party will finally attend the International Congress of Medicine August 6 to 12, in London.

#### Reviews and Book Notices

The Narcotic Drug Diseases and Allied Ailments—Pathology, Pathogenesis and Treatment. By George E. Pettey, M. D., Memphis, Tennessee. Member Memphis and Shelby County Society, Tennessee State Medical Association, Tri-State Medical Association of Mississippi, Arkansas and Tennessee; Also Mississippi Valley Medical Association and of the American Society for the Study of Alcohol and Narcotic Diseases. Illustrated. Philadelphia, F. A. Davis Co., Publishers, 1913.

We take great pleasure in commending to our readers this important handbook by a well known Tennessee authority upon drug addiction. It is a practical, well prepared treatise based upon a large practice extending over many years in the treatment of the habitues of drug addiction and will certainly prove of great assistance to all who avail themselves of the instruction the work offers. The vital and essential principles of the treatment advocated is elimination. We predict that the excellence of this book will procure for it a favorable reception from the profession.

The Surgical Clinics of John B. Murphy, M.D., at Mercy Hospital, Chicago. April 1913. Published Bi-Monthly by W. B. Saunders Co., Philadelphia and London.

We acknowledge with thanks to the publishers the receipt of this number 2 Vol. II of this most interesting publication. As a source of up-to-date information on advanced surgical procedures this serial publication has no equal. The conception of the plan by the publishers and the execution of the work by the distinguished surgeon places the profession under a debt of gratitude to all concerned in the production of these collections. The contents of this number show a rich collection of subjects. As an additional item of interest to the usual number of operations may be mentioned a talk on Gastric Ulcer, by Robert Milne, F. R. C. S., London. We urge upon all interested in surgical matters to subscribe to this invaluable series.

Medical and Surgical Reports of the Boston City Hospital. Sixteenth Series. Edited by George H. Monks, M.D., George G. Sears, M.D., and F. B. Mallory, M.D. Boston, Published by the Trustees. 1913.

This valuable collection of scientific papers contributed by members of the hospital staff is the first that has been published since 1905. The book contains thirty-two papers on subjects pertaining to important points in every branch of medicine, and the articles in every instance stand for the most advanced views in progressive medicine. The work is a most valuable contribution and is well worthy of careful study.

### Publisher's Department

"Elixir Saloform Comp., Flexner." Contains 20% alcohol. An efficient remedy for rheumatism, gout, cystitis and uric acid solvent. Prepared for physicians' prescriptions only. Robinson-Pettet Co., incorporated. (See advertisement in this issue.)

#### GLYCO-THYMOLINE.

Most all drugs have at one time or another been used in the effort to bring comfort and relief to the patient suffering from general pruritis.

It is generally conceded that lotions are perhaps the most efficacious and least "messy" way of applying the medicants.

Glyco-Thymoline is particularly a happy choice of the physician in his efforts to abate this most aggravating condition. The cooling, soothing and anæsthetic properties of this preparation used especially in those cases due to exposure to the inclement weather or to a gouty diathesia, give almost immediate relief from the burning and itching, thus conserving the patient's comfort, while at the same time a continuance of the treatment tends to bring about an ultimate cure.

The Glyco-Thymoline should be used full strength. In local cases a good way is to keep a soft cloth moistened with Glyco-Thymoline applied to the parts. This is almost certain of good results.

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#### ELEGANT

# PHARMACEUTICAL SPECIALTIES

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NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

Each fluidounce contains: \*

Hypophosphites	Soda 2 grains
	Lime 1½ "
4.6	Iron 1½ "
+ 1	Quinine '4 "
4.4	Manganese - 11/2 "
* *	Strychnine - 1-16 "

Dose-One to four fluidrachms.

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This preparation does not precipitateretains all the salts in perfect solution.

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A Modified and Improved Form of Chemical Food.

A SOLUTION of the Phosphates of Iron, Sodium, Potassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate	Sodium		-	-	-		-		12	grains
	Potassiu								4	- "
	Calcium	-	-	-	**	-		**	4	* 6
**	Iron	-	-	~	-		-	-	2	* *

FREE Monohydrated Phosphoric Acid 16 grains.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, FREE AND COMBINED.

Unsurpassed in excellency and palatability

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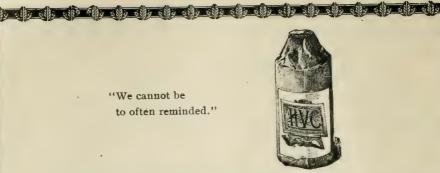
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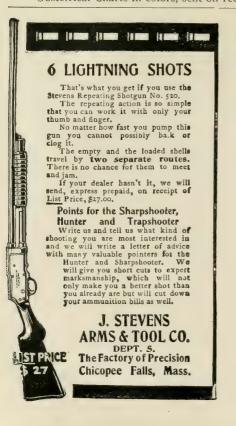
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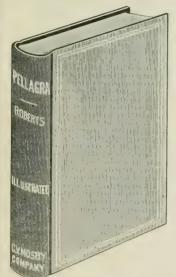
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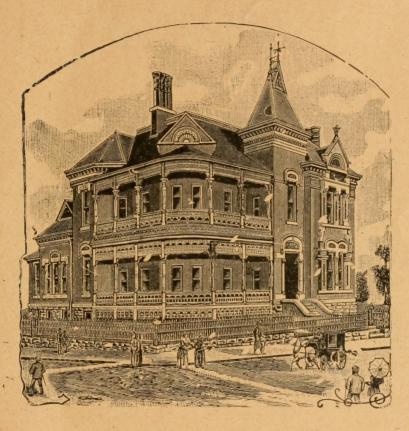


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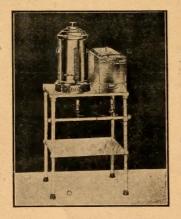
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